UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/578,647	05/09/2006	Robert Schipper	2069059US1	1801	
	7590 01/09/200 N, LUNDBERG & WO	EXAMINER			
P.O. BOX 2938			CHAI, LONGBIT		
MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER	
			2431		
			MAIL DATE	DELIVERY MODE	
			01/09/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application	No.	Applicant(s)				
		10/578,647		SCHIPPER ET AL.				
		Examiner		Art Unit				
		LONGBIT C	HAI	2431				
Period fo	The MAILING DATE of this communication or Reply	appears on the	cover sheet with the c	orrespondence ac	ldress			
WHI( - Exte after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING ansions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory per ure to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the material process.	COATE OF THI R 1.136(a). In no even riod will apply and will atute, cause the applic	S COMMUNICATION t, however, may a reply be tin expire SIX (6) MONTHS from ation to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).				
Status								
1)[\]	Responsive to communication(s) filed on 24	5 November 201	าล					
	Responsive to communication(s) filed on <u>25 November 2008</u> .  This action is <b>FINAL</b> .  2b) This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
<b>▽</b> /∟	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
4)⊠	E)⊠ Claim(s) <u>1-11</u> is/are pending in the application.							
٠/ڪ	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)□	Claim(s) is/are allowed.							
	s)⊠ Claim(s) is/are allowed. S)⊠ Claim(s) <u>1-11</u> is/are rejected.							
-	Claim(s) is/are objected to.							
	B) Claim(s) are subject to restriction and/or election requirement.							
	ion Papers							
· · ·	The specification is objected to by the Exam	ninor						
-	-		Tobjected to by the F	Evaminer				
10/	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
·	under 35 U.S.C. § 119			, , , , , , , , , , , , , , , , , , , ,				
	-	:	25 I I C C C 440/-)	(d) = - (f)				
	2) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)	a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
* (	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.								
Attachmen	nt(s)		_					
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  Notice of Informal Patent Application								
Paper No(s)/Mail Date 6) Other:								

Application/Control Number: 10/578,647 Page 2

Art Unit: 2431

## **DETAILED ACTION**

1. Currently pending claims are 1 – 11.

## Response to Arguments

- 2. Applicant's arguments with respect to the subject matter of the instant claims have been fully considered but are not persuasive.
- 3. As per claim 1, Applicant argues Kim does not teach "decryption of [encrypted content data] requires temporary changing control word (CW), in the data stream" because Kim neither teaches "control words in the data stream" nor does Kim teaches "control words are temporarily changed" (Remarks: Page 8, the last 2<sup>nd</sup>-Para). Examiner respectfully disagrees with the following rationale per each of the individual assertions:
  - The complete claim limitation is recited as "including encrypted content data, the decryption of which [i.e., encrypted content data] requires temporary changing control word (CW), in the data stream". Examiner notes (a) the portion of "the decryption of which [i.e., encrypted content data] requires temporary changing control word (CW)" is the insertion phrase into the claim limitation of "including encrypted content data in the data stream" by using the "dual-comma" and thereby it is the "encrypted content data in the data stream" not the "temporary changing control word in the data stream" being recited in the claim, (b) Examiner also notes Kim does teach "temporary changing control word" since the claim language "temporally changing", according to DICTIONARY.com, is interpreted as "not permanent or effective for a limited time only" and Kim teaches (1) transmits a RCM (received control message) containing a control word (CW) at the selected time period (Kim: Column 6 Line 13 16 and Column 4 Line 47: the CW is valid at least for a selected period

Application/Control Number: 10/578,647

Art Unit: 2431

of time) and (2) the broadcaster (i.e. CAS) may assign a *new* encryption (in terms of the algorithm and the ciphering key) in accordance with a specific calculation method to scramble data (Kim: Column 1 Line 34 – 40) and as such Kim does teach "temporary changing control word (CW)" and (3) Kim does also teach "the control word in the data stream" because CW is embedded in the RCM (Kim: Column 4 Line 47) and thus RCM is indeed one type of data stream containing CW to meet the claim language.

Page 3

- 4. As per claim 1, Applicant further asserts Kim does not teach content data that is substantially contemporaneous with the ECM (i.e. control word) for decrypting content data (Remarks: Page 7 / 2<sup>nd</sup> Para). Examiner respectfully disagrees with the following rationale:
  - Examiner notes the claim language "substantially contemporaneous", according to DICTIONARY.com, is interpreted as "a considerable amount of the present time" and Examiner notes, according to MPEP 2111, the broadest and reasonable claim interpretations must be made such that "the broadcaster (i.e. CAS) assigns a unique encryption to each receiver, inputs / downloads the unique encryption (i.e. the ciphering key CW) into a decryptor along with a particular encryption contained in a broadcast signal / program (i.e. content data) for allowing only permitted receivers to receive signals and programs, as taught by Kim (Column 1 Line 33 37 / Line 40 43), is sufficient to meet the claim language since "substantially contemporaneous", as alleged by Applicant, is not recited in the claim in a way regarding what exactly constitutes the extent of considerable (or substantial) amount of the present time. Examiner respectfully notes Applicant's argument has no merit since the alleged limitation has not been recited into the claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Accordingly, Applicant's arguments are respectfully traversed.

Art Unit: 2431

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (6,584,199) in view of Albanese et al. (2005/0033964).

As per claims 1, 4, 7, 10 and 11, Kim discloses: -including encrypted content data, the decryption of which requires temporally changing control words (CW), in the data stream (Column 4, Lines 41-47) & Examiner notes Kim does teach "temporary changing control word" since the claim language "temporally changing", according to DICTIONARY.com, is interpreted as "not permanent or effective for a limited time only" and Kim teaches (1) transmits a RCM (received control message) containing a control word (CW) at the selected time period (Kim: Column 6 Line 13 – 16 and Column 4 Line 47: the CW is valid at least for a selected period of time) and (2) the broadcaster (i.e. CAS) may assign a new encryption (in terms of the algorithm and the ciphering key) in accordance with a specific calculation method to scramble data (Kim: Column 1 Line 34 – 40) and as such Kim does teach "temporary changing control word (CW)" and (3) Kim does also teach "the control word in the data stream" because CW is embedded in the RCM (Kim: Column 4 Line 47) and thus RCM is indeed one type of data stream containing CW to meet the claim language;

- including first decryption control messages (ECM's) in the data stream, each first decryption control message (ECM) containing at least one of the control words that is required for

Application/Control Number: 10/578,647

Art Unit: 2431

Page 5

decrypting content data that is substantially contemporaneous with the first decryption control message (ECM) in the stream (Column 4, Lines 45-67) & Examiner notes the claim language "substantially contemporaneous", according to DICTIONARY.com, is interpreted as "a considerable amount of the present time" and Examiner notes, according to MPEP 2111, the broadest and reasonable claim interpretations must be made such that "the broadcaster (i.e. CAS) assigns a unique encryption to each receiver, inputs / downloads the unique encryption (i.e. the ciphering key CW) into a decryptor along with a particular encryption contained in a broadcast signal / program (i.e. content data) for allowing only permitted receivers to receive signals and programs, as taught by Kim (Column 1 Line 33 – 37 / Line 40 – 43), is sufficient to meet the claim language since "substantially contemporaneous", as alleged by Applicant, is not recited in the claim in a way regarding what exactly constitutes the extent of considerable (or substantial) amount of the present time);

- -including second decryption control messages (EMM's) which contain management information for entitling selected stream receiving devices to decrypt content data from the data stream using control words from the first decryption control messages (ECM's) (Column 4, Lines 55-60),
- extracting a control word from a first decryption message (ECM) from the stream in a stream receiving device (Column 4, Lines 55-60).

Kim does not explicitly teach: -including further management information in at least part of the first decryption messages (ECM's);

- together with said extracting, testing whether the first decryption message (ECM) contains further management information targeted at the stream receiving device,
- indefinitely disabling subsequent decryption of at least part of the stream in the stream receiving device upon said detection.

Art Unit: 2431

However, Albanese discloses: -including further management information in at least part of the first decryption messages (ECM's) (0022-0031);

- together with said extracting, testing whether the first decryption message (ECM) contains further management information targeted at the stream receiving device (0022-0031,
- indefinitely disabling subsequent decryption of at least part of the stream in the stream receiving device upon said detection (0040-0041). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to use the teachings of Albanese in conjunction with the teachings of Kim for the benefit of secure transmission between first and second module (0011).

As per claim 2, 5 and 8, rejected as applied to claims 1,4 and 7. Furthermore, Albanese discloses: wherein the stream receiving device contains identification information that individually identifies the stream receiving device, said first decryption message (ECM) containing further identification information, said testing comprising comparing the identification information and the further identification information (0040-0041).

As per claims, 3, 6 and 9, rejected as applied to claims 1,4 and 7. Furthermore, Albanese discloses: wherein the first encryption message (ECM) contains information that specifies a condition upon entitlement data, said testing comprising searching for entitlement data stored in said stream receiving device to detect whether any of the searched entitlement data meets said condition, and performing the disabling if such entitlement data is found (0020-0031).

Application/Control Number: 10/578,647 Page 7

Art Unit: 2431

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LONGBIT CHAI whose telephone number is (571)272-3788. The

examiner can normally be reached on Monday-Friday 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Longbit Chai/

Longbit Chai E.E. Ph.D Primary Examiner, Art Unit 2431

12/10/2008